

CLAIM LISTING

1-71. (Cancelled)

72. (Previously presented) A composition for injectable delivery of osteogenic proteins comprising an osteogenic protein and a hyaluronic acid ester, wherein the composition is in the form of a cylindrical rod suitable for intraosseous injection in solid state into a body.

73. (Cancelled)

74. (Previously presented) The composition of claim 72, wherein the osteogenic protein is selected from the group consisting of BMP-2, BMP-4, BMP-5, BMP-6, BMP-7, BMP-10, BMP-12, BMP-13, or MP52.

75. (Previously presented) The composition of claim 72, wherein the osteogenic protein is BMP-2.

76. (Previously presented) The composition of claim 72, wherein the osteogenic protein is BMP-6.

77. (Previously presented) The composition of claim 72, wherein the osteogenic protein is BMP-12.

78. (Previously presented) The composition of claim 72, wherein the osteogenic protein is BMP-13.

79. (Previously presented) The composition of claim 72, wherein the osteogenic protein is MP52.

80. (Cancelled)

81. (Previously presented) The composition of claim 72, further comprising a bone resorption inhibitor.

82. (Previously presented) The composition of claim 80, wherein the bone resorption inhibitor is a bisphosphonate.

83. (Previously presented) The composition of claim 82, wherein the bisphosphonate is selected from the group consisting of alendronate, cimadronate, clodronate, EB-1053, etidronates, ibandronate, neridronate, olpadronate, pamidronate, risedronate, tiludronate, YH 529, zolendronate, and pharmaceutically acceptable salts, esters, acids, and mixtures thereof.

84. (Cancelled)

85. (Previously presented) The composition of claim 72, wherein the hyaluronic acid ester comprises from about 50 percent to about 100 percent hyaluronic acid esterification.

86-91. (Cancelled)

92. (Previously presented) The composition of claim 72, wherein the hyaluronic acid is Hyaff11p65.

93-95. (Cancelled)

96. (Previously presented) The composition of claim 72, wherein the hyaluronic acid ester is a cross-linked hyaluronic acid.

97. (Previously presented) The composition of claim 72, wherein the diameter of the cylindrical rod is between about 0.5 to 1.5 mm.

98. (Previously presented) The composition of claim 72, wherein the length of the cylindrical rod is between about 2 cm and about 5 cm.

99. (Previously presented) A composition for treating osteoporotic bone prepared by a process comprising the steps of:

- (a) mixing an osteogenic protein and an hyaluronic acid ester to form an osteogenic mixture; and
- (b) forming and drying the osteogenic mixture into a cylindrical rod suitable for intraosseous injection in solid state into a body.

100. (Cancelled)

101. (Previously presented) The composition of claim 99, wherein the step of mixing further comprises mixing the osteogenic protein and hyaluronic acid ester with a bone resorption inhibitor.

102. (Previously presented) The composition of claim 101, wherein the bone resorption inhibitor is a bisphosphonate.

103. (Previously presented) The composition of claim 101, wherein the bisphosphonate is selected from the group consisting of alendronate, cimadronate, clodronate, EB-1053, etidronate, ibandronate, neridronate, olpadronate, pamidronate, risedronate, tiludronate, YH 529, zolendronate, and pharmaceutically acceptable salts, esters, acids, and mixtures thereof.

104. (Cancelled)

105. (Previously presented) The composition of claim 99, wherein the hyaluronic acid ester is prepared by hydration or solubilization of insoluble or partially soluble particles, films, fibers, non-woven pads, or sponges of hyaluronic acid benzyl esters in water, an organic solvent, or an aqueous buffer.

106. (Cancelled)

107. (Previously presented) The composition of claim 99, wherein the osteogenic protein is selected from the group consisting of BMP-2, BMP-4, BMP-5, BMP-6, BMP-7, BMP-10, BMP-12, BMP-13, and MP52.

108-112. (Cancelled)

113. (Previously presented) The composition of claim 99, wherein the step of mixing comprises mixing the osteogenic protein and hyaluronic acid ester with a solvent; and wherein the step of forming and drying the osteogenic mixture into a cylindrical rod comprises extruding the osteogenic mixture in a nonsolvent.

114. (Previously presented) The composition of claim 99, where in the step of forming and drying the osteogenic mixture comprises extruding the osteogenic mixture in a nonsolvent.

115. (Previously presented) The composition of claim 114, wherein the hyaluronic acid ester is water insoluble and the nonsolvent is ethanol or water.

116. (Previously presented) The composition of claim 99, where in the step of forming and drying the osteogenic mixture comprises extruding the osteogenic mixture into air and drying.

117-120. (Cancelled)